

## Improvement in Space Food Packaging Methods

Completed Technology Project (2012 - 2012)



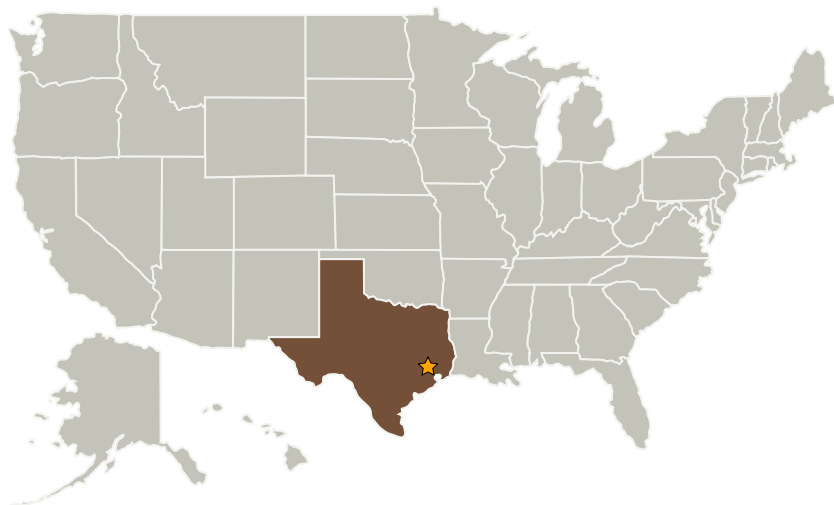
## Project Introduction

The Space Food Systems Laboratory's (SFSL) current Bulk Overwrap Bag (BOB) package, while simple and effective, leaves room for improvement. Currently, BOBs are sized to fit in Cargo Transfer Bags (CTB). On orbit, however, the pantry setup utilizes several Collapsible US Food Containers (CUFC). In addition, the entirety of the menu must be overwrapped with an aluminum laminate package in order to meet the oxygen and water vapor permeability requirements of an 18 month shelf life requirement. The development of a Phase II BOB could alleviate several or all of these issues in a cost, mass, and volume sensitive manner by changing the size and shape of the BOB as well as potentially finding an alternative material with sufficient barrier properties to eliminate the secondary overwraps.

## Anticipated Benefits

The end result of this work will be the basis on which a mass-producible Bulk Overwrap Bag will be developed. Ideally, forward work will finalize an optimized design with input from the manufacturer.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Johnson Space Center(JSC)	Lead Organization	NASA Center	Houston, Texas



Project Image Improvement in Space Food Packaging Methods

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## Organizational Responsibility

**Responsible Mission Directorate:**

Mission Support Directorate (MSD)

**Lead Center / Facility:**

Johnson Space Center (JSC)

**Responsible Program:**

Center Independent Research & Development: JSC IRAD

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## Primary U.S. Work Locations

Texas

## Images



**12423-1377548712615.jpg**

Project Image Improvement in  
Space Food Packaging Methods  
(<https://techport.nasa.gov/image/2257>)

## Project Management

### Program Manager:

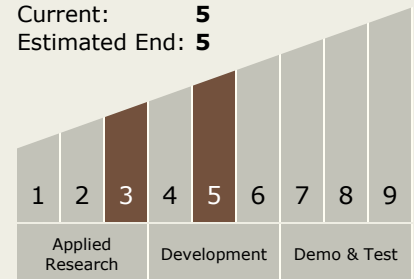
Carlos H Westhelle

## Technology Maturity (TRL)

Start: 3

Current: 5

Estimated End: 5



## Technology Areas

### Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  - TX06.1 Environmental Control & Life Support Systems (ECLSS) and Habitation Systems
    - TX06.1.2 Water Recovery and Management